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# Chile

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# **Best Prospects for U.S. Wood Products in Chile**

# **Report Categories:**

SP1 - Expand International Marketing Opportunities

**Wood Products** 

Product Brief

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## **Report Highlights:**

Chile presents market opportunities for U.S. wood products in the construction, wine, and salmon industries. U.S. wood products such as glulam beams, southern yellow pine, wood barrels, casks, wood wharves and piers, and floating storehouses are the best prospects.

# **Section I. Market Overview**

The top industrial wood products manufactured in Chile are chemical pulp, wood chips, sawn wood and wood panels and veneers (table 1).

According to the Chilean Forestry Commission (*CONAF*) total forestry area in Chile is 17,665,354 hectares (ha) from which around 85 percent are native forests and 15 percent are forestry plantations.

According to the Forestry Institute (*INFOR*) there are 2,396,562 ha of forestry plantations in Chile, from which 1,400,259 ha (58.4 percent) are radiate pine plantations and 848,869 ha (35.4 percent) eucalyptus plantations.

On January 2017, Chile suffered from the <u>worst wildfires in history</u> which amounted to a loss of 15 percent of the radiate pine planted area. The majority of the damage from the wildfires was concentrated in the Maule region and according to Chilean Wood Corporation (*CORMA*) the inputs for sawing mills will start to decrease in mid-2018.

In 2016 gross domestic product (GDP) of the wood and wood-manufacturing sector was \$7.7 billion, which represents 3.65 percent of the total Chilean GDP (based in Chilean Central Bank data). Wood sales in 2016 were \$5.7 billion, from which \$1.6 billion (28 percent) were sold in the domestic market.

**Table 1: Chilean Industrial Wood Production** 

Industrial Production	2014	2015	2016	Variation 2016/2015
Chemical pulp (MT)	4,895	4,806	4,859	1.1%
Mechanical and thermomechanical pulp (MT)	314	310	286	-7.7%
Newsprint paper (MT)	112	97	98	1.0%
Paper and paperboards (MT)	1,119	1,147	1,093	-4.7%
Chips (m <sup>3</sup> )	10,141	10,208	11,634	14.0%
Sawn wood (m <sup>3</sup> )	7,999	8,372	8,455	1.0%
Panels and veneers (m <sup>3</sup> )	2,940	3.310	3,180	-3.9%

Source: Chilean Forestry Institute (INFOR)

There are 13,806 companies in the wood sector in Chile (table 2). The high number of firms in each segment of the market shows that the sector is atomized, and there should be no challenge to entry of new firms due to market concentration.

Chilean forestry exports in 2017 increased by 2.7 percent over 2016 reaching \$5.4 billion. 58 percent of exports are "Cellulose, paper and others", and the remaining 42 percent are "Wood and panels" exports (table 3).

**Table 2: Chilean Companies in the Wood Sector** 

Wood Sector	Number of companies
Forest harvest	1,729
Collection of wild forest products	194

Harvest of forest species from tree nurseries	84
Forest services	638
Wood cutting services	1,125
Wood sawing and planning services	1,186
Panel and manufactures	187
Parts of carpentry for buildings and constructions	627
Wood containers manufacturing	228
Wood furniture manufacturing	4,276
Furniture wholesaling	488
Non-elaborated wood wholesaling	1,505
Furniture retailing	1,539
Total	13,806

Source: based in Internal Revenue Service (SII)

Table 3. Chilean Wood Exports (million dollars FOB)

Sector	2009	2010	2011	2012	2013	2014	2015	2016	2017
Forestry	14	22	25	24	31	32	29	31	41
Wood and panels	1,554	1,883	2,225	2,123	2,262	2,548	2,290	2,311	2,255
Lumber	429	549	677	699	812	990	823	822	803
Wood chips	275	341	412	371	315	309	278	350	367
Profiled woods	140	179	200	230	273	293	271	241	243
Wood panels	240	276	310	317	345	349	324	313	301
Veneered wood	289	333	415	281	254	328	350	348	311
Cellulose, paper and others	2,683	3,102	3,615	3,276	3,532	3,559	3,155	2,920	3,107
Raw cellulose	173	202	251	226	282	295	250	242	279
Bleached and semi-bleached cellulose from conifers	1,004	1,152	1,358	1,133	1,261	1,443	1,135	1,150	1,134
Bleached and semi-bleached cellulose from eucalyptus	836	1,054	1,180	1,162	1,252	1,140	1,175	1,001	1,169
Cardboard	255	301	341	345	330	349	299	267	239
Total forestry products	4,252	5,007	5,865	5,422	5,826	6,139	5,474	5,261	5,403

Source: Chilean Central Bank

Chilean imports of forestry products in 2017 increased by 2.4 percent over 2016 and totaled \$260 million (CIF). The top imported product is the oriented strand board (OSB) which is used in construction (\$28.6 million). The second largest import is wooden casks and barrels which are used in the wine industry (\$15.6 million) followed by medium density fiberboard which is used in the furniture business (\$14.5 million).

**Table 4: Chilean Imports of Forestry Products (millions of dollars)** 

Ran	k HS Code	Product	2013	2014	2015	2016	2017
1	44101200	Oriented strand board	15.9	16.4	15.8	31.3	28.6
		Casks, Barrels, Vats, Tubs And Other					
2	44160010	Coopers' Products And Parts Thereof, Of	22.9	19.5	17.1	16.6	15.6

		Wood, Including Staves					
		Medium Density Fiberboard (Mdf), Of A					
		Thickness Exceeding 5 Mm But Not					
3	44111300	Exceeding 9 Mm	15.2	19.4	19.4	19.2	14.5
4	44101100	Particle Board, Of Wood	16.4	8.1	11.5	11.0	13.5
5	44029000	Wood charcoal	14.2	13.5	13.1	12.2	12.4
		Chemical Wood pulp, Soda Or Sulfate,					
		Other Than Dissolving Grades, Semi					
6	47032100	bleached Or Bleached, Coniferous	9.2	11.3	13.1	10.4	10.9
7	44129990	Plywood, Veneered Panels And Similar Laminated Wood, Nesoi	8.8	7.4	8.2	7.4	10.8
	14127770	Fiberboard Of Wood Or Other Ligneous	0.0	7	0.2	7.4	10.0
		Materials, Of A Density Exceeding 0.8					
8	44119290	G/Cm3, Nesoi	4.5	13.1	12.0	10.9	10.1
_		Assembled Flooring Panels, Of Wood,					
9	44187900	Nesoi	14.7	14.5	11.8	10.6	9.6
		Oak Wood, Sawn Or Chipped Lengthwise, Sliced Or Peeled, Whether Or Not Planed					
10	44079110	Etc., Over 6 Mm (.236 In.) Thick	3.9	4.2	6.8	8.5	6.4
		(,					
11	44160020	Staves	6.4	6.1	5.2	5.2	5.3
		Formwork (Shuttering) For Concrete					
12	44184000	Constructional Work, Of Wood	0.7	1.3	1.7	3.2	4.6
13	48010010	Newsprint, In Rolls Or Sheets	3.5	6.3	5.6	4.9	4.3
13	40010010	Fiberboard Of Wood Or Other Ligneous	3.3	0.3	3.0	7.7	7.5
		Materials, Of A Density Exceeding 0.8					
14	44119220	G/Cm3, Nesoi	5.6	6.6	4.5	4.8	4.0
		Medium Density Fiberboard (Mdf), Of A					
15	44111400	Thickness Exceeding 9 Mm	4.9	4.7	7.0	4.0	3.7
16	44182010	Wood doors	2.4	2.0	1.8	1.7	3.2
10		W 004 40025	2	2.0	1.0	117	5.2
17	44186000	Builders' Posts And Beams, Of Wood	3.6	1.9	6.1	2.5	2.9
		Veneer Sheets And Sheets For Plywood,					
		Etc. Whether Or Not Planed, Etc., Not Over 6 Mm (.236 In.) Thick, Of					
18	44089090	Nonconiferous Wood, Nesoi	4.6	3.8	4.6	3.4	2.4
		Casks, Barrels, Vats, Tubs And Other					
		Coopers' Products And Parts Thereof, Of					
19	44160090	Wood, Including Staves	1.3	1.4	1.6	1.8	2.2
		Chemical Woodpulp, Soda Or Sulfate,					
20	47031900	Other Than Dissolving Grade, Unbleached, Nonconiferous	_	1.6	5.3	5.3	2.1
20	17031700	Wood In Chips Or Particles,	_	1.0	3.3	3.3	2.1
21	44012290	Nonconiferous	0.9	1.1	0.8	1.1	1.9
		Blockboard, Laminboard and Battenboard,					
22	44129400	Other Than Of Bamboo	0.4	0.8	1.7	1.4	1.9
23	44211000	Clothes Hangers, Of Wood	2.0	1.7	1.6	1.5	1.7
23	14211000	Chemical Woodpulp, Soda Or Sulfate,	2.0	1./	1.0	1.3	1./
		Other Than Dissolving Grades, Semi					
24	47032910	bleached Or Bleached, Nonconiferous	0.0	0.0	0.0	0.0	1.7
		Medium Density Fiberboard (Mdf), Of A					
25	44111200	Thickness Not Exceeding 5 Mm	10.2	4.7	4.9	2.0	1.7
		Forestry Total	293.1	272.6	262.8	254.8	260.6

Source: Chilean Custom Service

Chile imports wood products from a diverse group of countries including the United States. Detailed information coming from National Customs reveals that U.S. exporters are at present supplying the local market in most areas; however, there is still room to increase U.S. market share. According to the National Statistics Institute (NSI), wood is relevant in the construction industry in Chile. In 2016, 2.6 million square meters (m²) were constructed in Chile from which 456,357 m², 17 percent, were predominantly made of wood. Wood construction was 80 percent housing buildings and 20 percent commercial or service buildings. Other materials that are frequently used in construction are precast metal panels and concrete.

According to a 2017 report from the <u>Chilean Construction Chamber</u>, there is a housing deficit of 543,542 units for 1.5 million people from the more vulnerable sectors. The new housing development systems consider modular buildings of between 3-5 stories.

Chile is a seismically active region in the world and it has a strict building code and construction standards to prevent damage from seismic activity. While the seismic regulation allows wood as a construction material, restrictions on deformation post-earthquakes end up preventing the use of wood.

Chilean universities are working with the government to relax response restrictions to use wood as a construction material, which could increase demand for structural wood panels and engineered wood products as three to five story buildings could be made of wood or wood and concrete.

Section II. Advantages and Challenges for U.S. Exporters

Advantages	Challenges
In the short and medium term, local consumption is	Abundant supply of wood in the local market
expected to grow at high rates. Forecast for	and government programs to promote start-
economic growth in Chile, show that growth rates	ups, have fueled innovation in wood
both in GDP as in consumption (public and private)	manufacturing in Chile, which have resulted
will increase in 2018 and 2019, leading to positive	in main market niches for wood products
expectations for demand growth in wood	being provided by local producers adapting
manufactured products in the domestic market.	quickly to new demands.
U.S Chile free trade agreement (FTA) reduced	Chile is a competitive market which has free
tariffs to 0 percent in wood products imports from	trade agreements that cover 66 countries
the United States. The FTA has had an extensive	including the European Union, China,
history of successful implementation.	Central America and South American
	countries.
Dollar exchange rate is currently favorable for	Chile is an open economy so there is strong
imports because of the strengthening of the Chilean	competition from domestic and international
peso. According to economists the value of the	companies.
dollar should remain around 1 US\$ = 600 Chilean	companies.
pesos during 2018, which would increase demand	
for imports.	
American brands are well regarded as high quality	Chile has FTAs with 66 countries
with many well-known brands already present in the	worldwide, and they do not depend on
market.	imports from a specific region. Instead,
	imports that offer the best price and quality
	worldwide are the most attractive.
Equal playing field for imported and local products.	Chilean customers are accustomed to
	competitive prices due to the openness of the
	economy. Moreover, economic slowdown
	has increased their price-sensitivity.
Clear rules and transparent regulations offered by	The establishment of personal relationships
the government allow for fair competition.	is often not a priority for U.S. companies.
	Chileans value face-to-face meetings and
	strong personal relationships.

# Section III. Institutional Procedures Facing Wood Exports to Chile

Customs Ordinance (Decree/Law No. 30 of the Ministry of Finance of 16 June 2005 and amendments) governs customs procedures, the Organic Customs Law (Decree No. 329 of 20 June 1979) and amendments, and the Compendium of Customs Regulations. See <u>customs website</u> to access online information from the Chilean Customs Service.

If the free on board (FOB) value of imports exceeds \$1,000, the importer must use the services of a customs agent for inward clearance of the goods. Customs agents must be Chilean citizens and accredited by the National Director of Customs.

Transit, transshipment and redirection declarations have been processed electronically in customs posts since December 2010. Electronic system has now become mandatory in all customs posts.

Goods to be imported must remain in a customs warehouse while import procedures are being completed, unless these have been done before the goods arrive. Before the goods enter Chile, the customs agent has to forward an entry declaration of customs destination (DIN) or declaration of entry to the Customs. For further information about procedures visit Chilean Custom's website.

The Government of Chile applies a19 percent value added tax (VAT) on the domestic sale and imports of goods and services. The VAT on imported goods is calculated based on the customs value plus the import duty.

The commercial forms used by both importers and exporters are commercial invoices, certificates of origin, bills of lading, freight insurance and packing lists. Special permission, certificates, and approval documents, such as sanitary and phytosanitary certificates, are required for most agricultural products and in some cases for industrial products as well.

For specific information on import procedures and requirements please refer to Chile's <u>FAIRS GAIN</u> report.

#### **Section IV: Best Product Prospects**

#### 1. Products Present in the Market with Good Sales Potential

# Casks, barrels and hogsheads

The Chilean wine industry exhibits a high and constant demand for wood barrels and casks. The type of wood the barrels are made of is crucial for the quality of the wine produced. Traditionally, Chilean wine producers have resorted to European providers to satisfy their demand. However, high local demand and high prices of European barrels and casks has fueled local production of barrels, which has

proved to be slow, expensive and controversial due to quality.

In 2017, Chilean imports of casks, barrels and hogsheads were \$15.6 million and France was the main supplier with 85 percent of total imports. More than 70 companies import wood casks and barrels. The main importer of barrels and casks is *Viña Concha y Toro*, the largest wine producer in South America.

#### Staves

In 2017, Chilean imports of staves were \$5.3 million. The United States and France market share is 48 percent and 47 percent, respectively. Companies importing from the United States include wineries, beer manufacturers, and wine industry suppliers.

#### Wood Posts and Beams

The United Sates supplies 15 percent of total imports. Germany and Canada are the top suppliers. Importers are *Peri, Doka, Covasa, MDD Chile, Vama* and *Daniel Oma*.

# Oak Wood Sawn and Chipped

In 2017 Chile imported \$6.4 million of oak wood sawn or chipped. The United States supplies 40 percent of total imports. France exhibits a higher share. Romania, Spain and Slovakia have some market share.

#### Wood Windows and Frames

Denmark, China and Poland are the top suppliers of wood windows and frames. The United States provides 1.5 percent of total imports. *Glasstech, Wintec, Velux, Zara*, among others, are Chilean firms importing from these countries.

#### Wood Doors

Chile imported 3.2 million of wood doors in 2017. The United States provides 3.5 percent of total imports. Bolivia, Spain, Romania, China, Brazil and Austria are the top exporters. Importing companies are *NG Maderas*, *Geodis*, *Dap Ducass*, among others.

#### 2. Products Not Present in Market with Good Sales Potential

#### Glulam Beans

Worldwide, construction of wood buildings has been growing thanks to technologies developed throughout the last 20 years. Glulam beams (glued laminated timber) and CLT (cross laminated timber) are the basis for the two structural systems available for construction of wood buildings.

A critical issue for wood construction safety is the connection system. Earthquakes degrade resistance of connections. Ductility of connectors is key to avoid poor resistance, as adaptable connectors help dissipate earthquake energy. Around 95 percent of structural failures during earthquakes result from

connection failure. Glulam beams combined with tension cables have been used successfully in building constructions located in seismic areas, reducing the need of rigid metal nails or screws. In addition, tension cables allow for the structure to go back to its previous position after facing an earthquake, which reduces repairing costs or prevents demolition. Automatic reposition of the building is a benefit of glulam beams that CLT lacks.

Chilean glulam beams are produced based on an industrial process that relies on the visual classification of wood, which is authorized by regulation. Technical and academic analysis have emphasized that mechanical classification could result in better resistance to flexion and compression, thus imports could satisfy the demand of high quality glulam beams.

Companies in the wood production sector including lamination of wood poles can be found in the <u>INFOR wood directory</u>.

### Southern Yellow Pine (SYP)

SYP is known to be a substitute for Chilean radiata pine. U.S. exports of SYP to Chile have been low or inexistent in the past, but a combination of SYP and radiata pine could be used in Chilean constructions, and this could present a good sales opportunity.

Chilean Customs' foreign trade data supports that United States SYP exports to Chile in recent times were irrelevant, if they existed at all. The Chilean harmonized code (HS) classifies "Southern Yellow Pine sawn wood" under HS 4407.1090.

Results from Timber Research and Development Association (TRADA) show that SYP is significantly more resistant to indentation than Chilean radiata pine, Brazilian elliotis pine, European redwood, and European whitewood. SYP also tested significantly stronger in impact bending than all the other species. In addition, it was considerably denser than the other species, which indicates that furniture, cabinets, doors, and flooring made of SYP are less susceptible to dents, scratches, and other signs of wear. As before, these findings provide arguments to support the potential complementary role of SYP and radiata pine in Chilean constructions, as they don't substitute each other perfectly.

According to a survey report from the Chilean Forestry Institute's Research Department published the (Informe Tecnico 186), which addressed 141 construction firms in the most relevant urban areas in Chile (Valparaiso, Viña del Mar, Santiago, Concepción and Temuco), 98 percent of all firms had used sawn wood in their building activities, either as part of the structure of the building, or as part of the constructive process as such. The majority of firms use Radiata pine, as the only type of wood consumed, and only a minority of firms used a mixed of wood types. 79.9 percent of consumption was destined for the structure of the building itself, of which 35 percent were ceilings, 32.5 percent were walls and 12.4 percent were floors. 44 percent of the firms addressed by the survey said that they acquired wood from distributors, 32 percent from sawmills directly, 18 percent from barracks and 6 percent from other sources (such as independent agents).

Regarding the factors influencing usage of wood in the construction industry, firms underline a) a strong cultural factor undermining usage of wood for construction purposes due to the fact that wood is perceived as being less durable than other materials and therefore linked to the construction of low quality housing; b) lack of trustworthy wood distributors; c) a lack of information about the quality of

wood available, especially in terms of impregnation conditions; d) unskilled labor resulting for poor technical training devoted to use wood in construction; e) poor regulation allowing for the usage of wood in construction, let alone regulations promoting the usage of wood in construction; f) construction specifications rarely include rules to use wood.

## Wood Wharves and Piers

The extensive Chilean Pacific coast gives rise to several industries, such as salmon farming or artisanal fishing, most requiring the construction of wharves and piers as part of their infrastructure. Both pieces of infrastructure can be built in wood, steel or concrete. In particular, wood structures are preferred due to their low cost, ductility and low carbon footprint. However, wood wharves and piers, as well as the wood structures on which they are built, deteriorate easily due to contact with sea water, frequent rains, humid weather and intense industrial use. Therefore, there is a constant search for treated wood products that could provide easy and cheap replacements for these wharves/piers as a whole, or their parts. Additionally, the salmon industry requires wharves that fulfill bio-safe requirements to prevent dissemination of salmon diseases, which calls for materials tolerant to frequent disinfestation procedures and the replacement of specific parts working as sanitary barriers.

#### Floating Storehouses for the Salmon Industry

Floating storehouses are set up in the sea to store salmon food, and can be made from wood, steel or cement. Wood storehouses have the structural format of a platform and use floats coated with vinyl or plastic. Their capacity is usually up to 30 MT. Wood storehouses deteriorate easily specially on the sides exposed to the friction by boats that dock next to them, resulting in continuous demand from the sector, thus opening up new opportunities for providers of such products.

## 3. Products Without a Large Presence as they Face Significant Barriers

Post is not aware of any significant trade barriers to enter the Chilean market. As of 2015 all trade tariffs were successfully eliminated and all U.S. exports enter Chile duty-free. The high number of Free Trade Agreements (26) make it one of the most open economies in the world. For specific information on import procedures and requirements please refer to Chile's <u>FAIRS GAIN report</u>.

# Section V. Key Contacts and Further Information

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Useful sources:

U.S. Department of Agriculture in Santiago Chile: www.usdachile.cl

Foreign Agricultural Service homepage: www.fas.usda.gov

For more information on U.S. export opportunities to Chile see <u>Exporter Guide GAIN report</u>, <u>Food Processing Ingredients GAIN report and Food Service GAIN report</u>.